

Article 15. Incinerators**§66264.340. Applicability.**

(a) The regulations in this article apply to owners or operators of facilities that incinerate hazardous waste, except as 66264.1 provides otherwise. The following facility owners or operators are considered to incinerate hazardous waste:

(1) owners or operators of hazardous waste incinerators (as defined in section 66260.10).

(b) After consideration of the waste analysis included with Part B of the permit application, the Department, in establishing the permit conditions, shall exempt the applicant from all requirements of this article except sections 66264.341 (Waste analysis) and 66264.351 (Closure):

(1) if the Department finds that the waste to be burned is:

(A) listed as a hazardous waste in article 4 of chapter 11 of this division solely because it is ignitable (Hazard Code I), corrosive (Hazard Code C), or both; or

(B) listed as a hazardous waste in article 4 of chapter 11 of this division solely because it is reactive (Hazard Code R) for characteristics other than those listed in section 66261.33(a)(4) and (a)(5), and will not be burned when other hazardous wastes are present in the combustion zone; or

(C) a hazardous waste solely because it possesses the characteristic of ignitability, corrosivity, or both, as determined by the test for characteristics of hazardous wastes under article 3 of chapter 11 of this division; or

(D) a hazardous waste solely because it possesses any of the reactivity characteristics described by section 66261.23 (a)(1), (a)(2), (a)(3), (a)(6), (a)(7), and (a)(8), and will not be burned when other hazardous wastes are present in the combustion zone; and

(2) if the waste analysis shows that the waste contains none of the hazardous constituents listed in Appendix VIII of chapter 11 of this division, which would reasonably be expected to be in the waste.

(c) If the waste to be burned is one which is described by subsections (b)(1)(A), (b)(1)(B), (b)(1)(C), or (b)(1)(D) of this section and contains insignificant concentrations of the hazardous constituents listed in Appendix VIII to chapter 11 of this division, then the Department shall, in establishing permit conditions, exempt the applicant from all requirements of this article, except sections 66264.341 (Waste analysis) and 66264.351 (Closure), after consideration of the waste analysis included with Part B of the permit application, unless the Department finds that the waste will pose a threat to human health and the environment when burned in an incinerator.

(d) The owner or operator of an incinerator may conduct trial burns subject only to the requirements of section 66270.62 (Short term and incinerator permits).

NOTE: Authority cited: Sections 25159, 25159.5, 58004 and 58012, Health and Safety Code. Reference: Sections 25159.5 and 25200, Health and Safety Code; 40 CFR Section 264.340.

HISTORY

1. New section filed 5-24-91; operative 7-1-91 (Register 91, No. 22).

2. Amendment of subsection (a)(1), repealer of subsection (a)(2), and amendment of NOTE filed 7-1-96; operative 7-31-96 (Register 96, No. 27).

§66264.341. Waste Analysis.

(a) As a portion of the trial burn plan required by section 66270.62, or with Part B of the permit application, the owner or operator shall have included an analysis of the waste feed sufficient to provide all information required by section 66270.62(b) or 66270.19. Owners or operators of new hazardous waste incinerators shall provide the information required by section 66270.62(c) or section 66270.19 to the greatest extent possible.

(b) Throughout normal operation, the owner or operator shall conduct sufficient waste analysis to verify that waste feed to the incinerator is within the physical and chemical composition limits specified in that owner or operator's permit (under section 66264.345(b)).

NOTE: Authority cited: Sections 208 and 25159, Health and Safety Code. Reference: Sections 25159.5 and 25200, Health and Safety Code; 40 CFR Section 264.341.

HISTORY

1. New section filed 5-24-91; operative 7-1-91 (Register 91, No. 22).

§66264.342. Principal Organic Hazardous Constituents (POHCs).

(a) Principal Organic Hazardous Constituents (POHCs) in the waste feed shall be treated to the extent required by the performance standard of section 66264.343.

(b)(1) One or more POHCs will be specified in the facility's permit, from among those constituents listed in Appendix VIII and Appendix X to chapter 11 of this division, for each waste feed to be burned. This specification will be based on the degree of difficulty of incineration of the organic constituents in the waste and on their concentration or mass in the waste feed, considering the results of waste analyses and trial burns or alternative data submitted with Part B of the facility's permit application. Organic constituents which represent the greatest degree of difficulty of incineration will be those most likely to be designated as POHCs. Constituents are more likely to be designated as POHCs if they are present in large quantities or concentrations in the waste.

(2) Trial POHCs will be designated for performance of trial burns in accordance with the procedure specified in section 66270.62 for obtaining trial burn permits.

NOTE: Authority cited: Sections 208 and 25159, Health and Safety Code. Reference: Sections 25159.5 and 25200, Health and Safety Code; 40 CFR Section 264.341.

HISTORY

1. New section filed 5-24-91; operative 7-1-91 (Register 91, No. 22).

§66264.343. Performance Standards.

An incinerator burning hazardous waste shall be designed, constructed, and maintained so that, when operated in accordance with operating requirements specified under section 66264.345, it will meet the following performance standards.

(a)(1) Except as provided in subsection (a)(2) of this section, an incinerator burning hazardous waste shall achieve a destruction and removal efficiency (DRE) of 99.99% for each principal organic hazardous constituent (POHC) designated (under section 66264.342) in its permit for each waste feed. DRE is determined for each POHC from the following equation:

$$\text{DRE} = \frac{(W_{\text{in}} - W_{\text{out}})}{W_{\text{in}}} \times 100\%$$

Where: W_{in} = mass feed rate of one principal organic hazardous constituent (POHC) in the waste stream feeding the incinerator and W_{out} = mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere.

(2) An incinerator burning hazardous wastes F020, F021, F022, F023, F026, or F027 shall achieve a destruction and removal efficiency (DRE) of 99.9999% for each principal organic hazardous constituent (POHC) designated under section 66264.342 in its permit. This performance shall be demonstrated on POHCs that are more difficult to incinerate than tetra-, penta-, and hexachlorodibenzo-p-dioxins and dibenzofurans. DRE is determined for each POHC from the equation in section 66264.343(a)(1). In addition, the owner or operator of the incinerator shall notify the Department of that owner or operator's intent to incinerate hazardous wastes F020, F021, F022, F023, F026, or F027.

(b) An incinerator burning hazardous waste and producing stack emissions of more than 1.8 kilograms per hour (4 pounds per hour) of hydrogen chloride (HCl) shall control HCl emissions such that the rate of emission is no greater than the larger of either 1.8 kilograms per hour or 1% of the HCl in the stack gas prior to entering any pollution control equipment.

(c) An incinerator burning hazardous waste shall not emit particulate matter in excess of 180 milligrams per dry standard cubic meter (0.08 grains per dry standard cubic foot) when corrected for the amount of oxygen in the stack gas according to the formula:

$$P_c = P_m \times \frac{14}{21 - Y}$$

Where P_c is the corrected concentration of particulate matter, P_m is the measured concentration of particulate matter, and Y is the measured concentration of oxygen in the stack gas, using the Orsat method for oxygen analysis of dry flue gas, presented in Part 60, Appendix A (Method 3), of 40 CFR. This correction procedure is to be used by all hazardous waste incinerators except those operating under conditions of oxygen enrichment. For these facilities, the Department will select an appropriate correction procedure, to be specified in the facility permit.

(d) For purposes of permit enforcement, compliance with the operating requirements specified in the permit (under section 66264.345) will be regarded as compliance with this section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the performance requirements of this section may be "information" justifying modification, revocation, or reissuance of a permit under section 66270.41.

NOTE: Authority cited: Sections 208 and 25159.5, Health and Safety Code. Reference: Sections 25159.5 and 25200, Health and Safety Code; 40 CFR Section 264.343.

HISTORY

1. New section filed 5-24-91; operative 7-1-91 (Register 91, No. 22).

§66264.344. Hazardous Waste Incinerator Permits.

(a) The owner or operator of a hazardous waste incinerator may burn only wastes specified in the owner or operator's permit and only under operating conditions specified for those wastes under section 66264.345, except:

- (1) in approved trial burns under section 66270.62; or
- (2) under exemptions created by section 66264.340.

(b) Other hazardous wastes may be burned only after operating conditions have been specified in a new permit or a permit modification as applicable. Operating requirements for new wastes may be based on either trial burn results or alternative data included with Part B of a permit application under section 66270.19.

(c) The permit for a new hazardous waste incinerator shall establish appropriate conditions for each of the applicable requirements of this article, including but not limited to allowable waste feeds and operating conditions necessary to meet the requirements of section 66264.345, sufficient to comply with the following standards.

(1) For the period beginning with initial introduction of hazardous waste to the incinerator and ending with initiation of the trial burn, and only for the minimum time required to establish operating conditions required in subsection (c)(2) of this section, not to exceed a duration of 720 hours operating time for treatment of hazardous waste, the operating requirements shall be those most likely to ensure compliance with the performance standards of section 66264.343, based on the Department's engineering judgment. The Department may extend the duration of this period once for up to 720 additional hours when good cause for the extension is demonstrated by the applicant.

(2) For the duration of the trial burn, the operating requirements shall be sufficient to demonstrate compliance with the performance standards of section 66264.343 and shall be in accordance with the approved trial burn plan.

(3) For the period immediately following completion of the trial burn, and only for the minimum period sufficient to allow sample analysis, data computation, and submission of the trial burn results by the applicant, and review of the trial burn results and modification of the facility permit by the Department, the operating requirements shall be those most likely to ensure compliance with the performance standards of section 66264.343, based on the Department's engineering judgment.

(4) For the remaining duration of the permit, the operating requirements shall be those demonstrated, in a trial burn or by alternative data specified in section 66270.19(c), as sufficient to ensure compliance with the performance standards of section 66264.343.

NOTE: Authority cited: Sections 208 and 25159, Health and Safety Code. Reference: Sections 25159.5 and 25200, Health and Safety Code; 40 CFR Section 264.344.

HISTORY

1. New section filed 5-24-91; operative 7-1-91 (Register 91, No. 22).

§66264.345. Operating Requirements.

(a) An incinerator shall be operated in accordance with operating requirements specified in the permit. These will be specified on a case-by-case basis as those demonstrated (in a trial burn or in alternative data as specified in section 66264.344(b) and included with Part B of a facility's permit application) to be sufficient to comply with the performance standards of section 66264.343.

(b) Each set of operating requirements will specify the composition of the waste feed (including acceptable variations in the physical or chemical properties of the waste feed which will not affect compliance with the performance requirement of section 66264.343) to which the operating requirements apply of section 66264.343) to which the operating requirements apply. For each such waste feed, the permit will specify acceptable operating limits including the following conditions:

- (1) carbon monoxide (CO) level in the stack exhaust gas;
- (2) waste feed rate;
- (3) combustion temperature;
- (4) an appropriate indicator of combustion gas velocity;
- (5) allowable variations in incinerator system design or operating procedures; and
- (6) such other operating requirements as are necessary to ensure the performance standards of section 66264.343 are met.

(c) During start-up and shut-down of an incinerator, hazardous waste (except wastes exempted in accordance with section 66264.340) shall not be fed into the incinerator unless the incinerator is operating within the conditions of operation (temperature, air feed rate, etc.) specified in the permit.

(d) Fugitive emissions from the combustion zone shall be controlled by:

- (1) keeping the combustion zone totally sealed against fugitive emissions; or
- (2) maintaining a combustion zone pressure lower than atmospheric pressure; or
- (3) an alternate means of control demonstrated (with Part B of the permit application) to provide fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure.

(e) An incinerator shall be operated with a functioning system to automatically cut off waste feed to the incinerator when operating conditions deviate from limits established under subsection (a) of this section.

(f) An incinerator shall cease operation when changes in waste feed, incinerator design, or operating conditions exceed limits designated in its permit.

NOTE: Authority cited: Sections 208 and 25159, Health and Safety Code. Reference: Sections 25159.5 and 25200, Health and Safety Code; 40 CFR Section 264.345.

HISTORY

1. New section filed 5-24-91; operative 7-1-91 (Register 91, No. 22).

§66264.347. Monitoring and Inspections.

(a) The owner or operator shall conduct, as a minimum, the following monitoring while incinerating hazardous waste.

(1) Combustion temperature, waste feed rate, and the indicator of combustion gas velocity specified in the facility permit shall be monitored on a continuous basis.

(2) CO shall be monitored on a continuous basis at a point in the incinerator downstream of the combustion zone and prior to release to the atmosphere.

(3) Upon request by the Department, sampling and analysis of the waste and exhaust emissions shall be

conducted to verify that the operating requirements established in the permit achieve the performance standards of section 66264.343.

(b) The incinerator and associated equipment (pumps, valves, conveyors, pipes, etc.) shall be subjected to thorough visual inspection, at least daily, for leaks, spills, fugitive emissions, and signs of tampering.

(c) The emergency waste feed cutoff system and associated alarms shall be tested at least weekly to verify operability, unless the applicant demonstrates to the Department that weekly inspections will unduly restrict or upset operations and that less frequent inspection will be adequate. At a minimum, operational testing shall be conducted at least monthly.

(d) This monitoring and inspection data shall be recorded and the records shall be placed in the operating log required by section 66264.73.

NOTE: Authority cited: Sections 208 and 25159, Health and Safety Code. Reference: Sections 25159.5 and 25200, Health and Safety Code; 40 CFR Section 264.347.

HISTORY

1. New section filed 5-24-91; operative 7-1-91 (Register 91, No. 22).

§66264.351. Closure.

(a) At closure the owner or operator shall remove all hazardous waste and hazardous waste residues (including, but not limited to, ash, scrubber waters, and scrubber sludges) from the incinerator site.

(b) At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with section 66261.3(d), that the residue removed from the incinerator is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and shall manage it in accordance with applicable requirements of this division.

NOTE: Authority cited: Sections 208 and 25159, Health and Safety Code. Reference: Sections 25159.5 and 25200, Health and Safety Code; 40 CFR Section 264.351.

HISTORY

1. New section filed 5-24-91; operative 7-1-91 (Register 91, No. 22).